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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,136	12/08/1998	DARRYN MCDADE	97-S-159	6383

30425 7590 06/04/2002

STMICROELECTRONICS, INC.  
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CARROLLTON, TX 75006

EXAMINER

CHIEU, PO LIN

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 06/04/2002

*7*

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/207,136

Applicant(s)

MCDADE ET AL.

Examiner

Polin Chieu

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 25-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 21-24 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 21-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group II, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

### ***Drawings***

2. The corrected or substitute drawings were received on 3/29/02. These drawings are accepted by the examiner.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 5-8, 14-17, 19, 25, 28-30, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Sawabe et al (5,933,569).

Regarding claim 1, Sawabe et al discloses a file reader (80, fig. 16)); a navigator that instructs the file reader (col. 18, lines 48-65); a splitter that separates the encoded A/V data stream into one or more component data streams; and a reprogrammable proxy filter that decodes and converts the one or more component data streams into three or more renderable signals including at least one audio signal and at least two video signals (87-95, fig. 16).

Regarding claim 5, Sawabe et al discloses an audio data stream (93, fig. 16); a video data stream (88); a subpicture data stream (90); and a navigation data stream (95).

Regarding claim 6, Sawabe et al discloses that the navigator is coupled to the splitter (86) such that the navigator (100, fig. 16) can use the navigation data stream to select the encoded A/V data stream to be obtained.

Regarding claim 7, Sawabe et al discloses an audio decoder (93, fig. 16); a video decoder (88); and a subpicture decoder (90).

Regarding claim 8, Sawabe et al discloses that the reprogrammable proxy filter can decode and convert a component data stream that conforms to a MPEG coding standard (col. 7, lines 13-20).

Regarding claim 14, Sawabe et al discloses a renderable audio signal ( $S_{add}$ , fig. 16); a renderable video signal ( $S_{vd}$ ); and a renderable subpicture signal ( $S_{spd}$ ).

Regarding claim 15, Sawabe et al discloses a mixer for combining the subpicture signal with the video signal and producing a combined signal (91, fig. 16).

Regarding claim 16, Sawabe et al discloses a reprogrammable proxy filter comprising a function for synchronizing the three or more renderable signals (col. 17, lines 30-64).

Regarding claim 17, Sawabe et al discloses an audio renderer (93) coupled to the reprogrammable proxy filter and an audio application program interface (internal hardware or software controlling audio decoding in the audio decoder), the audio renderer controlling the manipulation and rendering of an audio signal from the three or more renderable signals (col.17, lines 30-64); and a video renderer (88) coupled to the reprogrammable proxy filter and a video application program interface (internal hardware or software controlling video decoding in the video decoder), the video renderer controlling the manipulation and rendering of a video signal from the three or more renderable signals (col. 17, lines 30-64).

Regarding claim 19, Sawabe et al discloses that the data source is a digital video disc in figure 1a.

Regarding claim 25, Sawabe et al discloses a DVD drive (fig. 16); a file reader (80); a navigator (col. 18, lines 48-65); a splitter (86); a reprogrammable proxy filter (87-95); and a mixer combining the at least two video signals (91). The audio and video

renderers were discussed in the art rejection of claim 17. Please refer to the art rejection of claim 17.

The limitations of claim 28 were discussed in the art rejection of claim 5. Please refer to the art rejection of claim 5.

The limitations of claim 29 were discussed in the art rejection of claim 7. Please refer to the art rejection of claim 7.

The limitations of claim 30 were discussed in the art rejection of claim 8. Please refer to the art rejection of claim 8.

The limitations of claim 32 were discussed in the art rejection of claim 16. Please refer to the art rejection of claim 16.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4, 20, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawabe et al in view of Nakai et al (5,999,698).

Regarding claims 2-4 and 26-27, Sawabe et al discloses a user interface (98) connected to the navigator for selecting the encoded A/V data stream to be obtained. However, Sawabe et al does not disclose that the user interface may be used to select the A/V signal to be obtained; the user interface comprises more than one predefined

function for selecting an A/V signal to be obtained; and wherein the predefined functions are play, pause, menu, stop, previous, and next.

Nakai et al teaches a user interface selecting the A/V signal to be obtained using the predefined functions play (5c), pause (5d), menu (5n), previous (5f), and next (5f) in figure 8.

It would have been highly desirable to predefined functions supported by a user interface so that the user can control the device from far away, thereby making the device more user friendly.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have play, pause, menu, previous, and next functions on a user interface in the device of Sawabe et al.

Regarding claim 20, Sawabe et al discloses a file reader (80); a navigator (col. 18, lines 48-65); a user interface (98); a splitter (86), the navigator (100) being coupled to the splitter (80) such that the navigator can use the navigation data stream to select the encoded A/V data stream to be obtained; an audio filter (93); a video filter (88); a subpicture filter (90); a mixer (91); a synchronizing filter, an audio renderer, and a video renderer (col. 17, lines 30-64), as discussed in the previous rejections. However, Sawabe et al does not disclose that the user interface has predefined functions. Nakai et al teaches having one or more predefined functions, as discussed in the art rejection of claims 2-4 and 26-27. Please refer to the art rejection of claims 2-4 and 26-27.

8. Claims 9-11 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawabe et al in view of Heo et al (5,987,417).

Regarding claims 9-11 and 31, Sawabe et al does not disclose decoding and converting a component data stream that conforms to a Dolby AC-3 coding standard; and decoding and converting a component data stream that conforms to a PCM coding standard.

Heo et al teaches decoding and converting a component data stream that conforms to a Dolby AC-3 standard and a PCM standard (col. 22, lines 55-65). Therefore, Heo et al teaches using one or more decoding standards to decode and convert the one or more component data streams.

It would have been highly desirable to decode and convert data conforming to the Dolby AC-3 standard and a PCM standard, since A/V data is commonly stored according to the standards on DVDs.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to decode and convert data conforming to the Dolby AC-3 standard and the PCM standard in the device of Sawabe et al.

9. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawabe et al in view of Heo et al and Bheda et al (5,990,958).

Regarding claims 12-13, Sawabe et al does not disclose that one or more decoding standards can be added or upgraded via software.

Bheda et al teaches decoding video using software (112a) in fig. 2 (col. 3, lines 41-52). Further, it is well known in the art to upgrade or add new software to a CPU. Therefore, it would have been obvious to update or add new software for decoding.



It would have been highly desirable to upgrade or add new software so that the decoder can decode changed or new formats. For example, MPEG-1 was replaced by a new format MPEG-2. The software for decoding MPEG-1 could be updated or new software could be added to the CPU to allow decoding of MPEG-2.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to allow decoding standards to be upgraded or added via software in the device of Sawabe et al.

10. Claims 18 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawabe et al in view of Baumgartner et al (5,642,171).

Regarding claims 18 and 33, Sawabe et al does not disclose a sound card; an audio driver; a video graphics adapter; and a video driver.

Baumgartner et al teaches a sound card; an audio driver; a video graphics adapter; and a video driver (col. 1, lines 31-53 and col. 10, lines 40-64).

It would have been highly desirable to have a sound card; an audio driver; a video graphics adapter; and a video driver so that a DVD could be reproduced using a personal computer.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a sound card; an audio driver; a video graphics adapter; and a video driver in the device of Sawabe et al.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nonomura et al (5,734,788), and Zenda (5,809,245).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-F 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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PC  
May 31, 2002

A handwritten signature in black ink, appearing to read 'A. Christensen', with a long horizontal flourish extending to the right.

**ANDREW CHRISTENSEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**